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REMARKS

Claims 3-9 have been cancelled. Claims 1 and 14 have been amended. Claims 34-60 have been added. Claims 1-2 and 10-60 are currently pending in the application. In view of the following remarks, Applicant respectfully requests withdrawal of the rejections and forwarding of the application onto issuance.

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Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Applicant thanks the Examiner for the indication of allowable subject matter. Applicant has rewritten claim 3 in independent form as claim 40, and Applicant has rewritten claim 4 in independent form as claim 51. These claims remain in condition for allowance.

The §103 Rejections

Claims 1, 2, 10-13, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over a document entitled "Understanding XML Schemas" to Walsh (hereinafter "Walsh") in view of U.S. Patent No. 5,956,726 to Aoyama et al. (hereinafter "Aoyama").

Claims 5-9, 32 and 33 stand rejected under §103 as being unpatentable over Walsh and Aoyama, in further view of a document entitled "How to implement Web-based Groupware Systems based on WebDAV" to Dridi and Neumann (hereinafter referred to as "Dridi").

Claims 14-17, 23-27, and 29 stand rejected under §103(a) as being unpatentable over U.S. Patent No. 6,411,974 to Graham et al. (hereinafter "Graham") in view of Aoyama.

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24 25 Claims 18-22 and 28 stand rejected under §103(a) as being unpatentable over Graham and Aoyama in view of Dridi.

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Claims 1-2 and 5-13

As amended, claim 1 recites a method of parsing an Extensible Markup Language (XML) data stream. The recited method comprises [emphasis added]:

- defining a plurality of states, individual states being associated with individual elements of an XML data stream;
- associating one or more rules with each state;
- · receiving an XML data stream;
- evaluating the XML data stream against one or more of the rules for individual elements contained in the XML data stream; and
- processing only those portions of the XML data stream that do not violate any of the rules that are associated with those portions.

In making out the rejection of this claim, the Office notes that Walsh, the primary reference cited, does not disclose a technique for disregarding associated portions of the XML data stream if any rules are violated. Applicant agrees. The Office then relies on Aoyama and argues that it discloses a method for structured document difference string extraction. The Office then appears to argue that Aoyama's "ignoring tag" criterion, discussed in column 7, lines 10-12, discloses a similar method for ignoring data within documents within an extraction process. Based on this, the Office argues that the combination of Walsh and Aoyama would render the subject matter of claim 1 obvious "to provide a proficient framework for streamlining and parsing XML data streams."

Applicant respectfully disagrees and traverses the rejection. Applicant has clarified this claim by specifying that the method of claim 1 processes only those portions of the XML data stream that do not violate any of the rules that are

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associated with those portions. In contrast, Aoyama discloses the following in column 7, lines 34-51 [emphasis added]:

Rule 5: Don't allocate ignoring tags and the character strings sandwiched between the ignoring tags to any node. . . .

Step 204:

The document trees prepared by the above-mentioned steps are compared by node with each other and the difference is extracted by node. . . .

Step 205:

The difference is extracted, this time, by character, only for the nodes found to be non-coincident. . . . The ignoring tags that were not compared at step 204 are compared at the present step.

As shown in the above excerpt, Aoyama does not allocate ignoring tags (and the character strings sandwiched between the ignoring tags) to any node of the document trees. Therefore, ignoring tags are left out of the comparison process of step 204. However, Aoyama then proceeds to extract the difference character by character for the ignoring tags and the character strings sandwiched between them in step 205. Therefore, not only does Aoyama not process "only those portions of the XML data stream that do not violate any of the rules that are associated with those portions," it actually appears to process the information more thoroughly (character by character) than it does text associated with other types of tags found non-coincident (which it compares node by node). As such, Aoyama teaches directly away from the subject matter of this claim.

Accordingly, for at least this reason, the Office has failed to establish a prima facie case of obviousness and this claim is allowable.

Claims 2 and 10-13 depend either directly or indirectly from claim 1 and are allowable as depending from an allowable base claim. These claims are also

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23 24 25 allowable for their own recited features which, in combination with those recited in claim 1, are neither disclosed nor suggested by the references of record either singly or in combination with one another.

Claims 14-23

As amended, claim 14 recites a method of parsing an Extensible Markup Language (XML) data stream. The recited method comprises [emphasis added]:

- defining a schema module that is associated with an HTTP request type that is received from a client, the schema module having a. function that determines whether an XML data stream conforms to a given schema that is associated with the HTTP request type;
- evaluating an XML data stream with the schema module; and
- processing only those portions of the XML data stream that conform to the given schema.

In making out the rejection of this claim, the Office notes that Graham, the primary reference cited, does not disclose disregarding portions of the XML data stream if the data stream does not conform to the given schema. Applicant agrees. The Office then relies on Aoyama and argues that it discloses a method for structured document difference string extraction. The Office then appears to argue that Aoyama's "ignoring tag" criterion, discussed in column 7, lines 10-12, discloses a similar method for ignoring data within documents within an extraction process. Based on this, the Office argues that the combination of Graham and Aoyama would render the subject matter of claim 14 obvious "to provide a wellstructure[d] framework for proficiently parsing data streams."

Applicant respectfully disagrees and traverses the rejection. Applicant has clarified this claim by specifying that the method of claim 14 processes only those portions of the XML data stream that conform to the given schema. In contrast,

Aoyama discloses the following in column 7, lines 34-51 [emphasis added]:

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Rule 5: Don't allocate ignoring tags and the character strings sandwiched between the ignoring tags to any node. . . .

Step 204:

The document trees prepared by the above-mentioned steps are compared by node with each other and the difference is extracted by node. . . .

Step 205:

The difference is extracted, this time, by character, only for the nodes found to be non-coincident. . . . The ignoring tags that were not compared at step 204 are compared at the present step.

As shown in the above excerpt, Aoyama does not allocate ignoring tags (and the character strings sandwiched between the ignoring tags) to any node of the document trees. Therefore, ignoring tags are left out of the comparison process of step 204. However, Aoyama then proceeds to extract the difference character by character for the ignoring tags and the character strings sandwiched between them in step 205. Therefore, not only does Aoyama not process "only those portions of the XML data stream that conform to the given schema," it actually appears to process the information more thoroughly (character by character) than it does text associated with other types of tags found non-coincident (which it compares node by node). As such, Aoyama teaches directly away from the subject matter of this claim.

Accordingly, for at least this reason, the Office has failed to establish a prima facie case of obviousness and this claim is allowable.

Claims 15-23 depend either directly or indirectly from claim 14 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 14, are neither disclosed nor suggested by the references of record either LCE & HAYES, PLIC

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singly or in combination with one another. In addition, as these claims are allowable, Dridi is not seen to add anything of significance to the rejection of claims 18-22.

Claims 2<u>4-29</u>

Claim 24 recites an Extensible Markup Language (XML) parsing system comprising [emphasis added]:

- a parser configured to receive an XML data stream and generate a series of calls as it parses the XML data stream;
- a node factory communicatively associated with the parser and configured to receive the parser's calls and responsive thereto construct a representation of the XML data stream that the parser is parsing; and
- a schema module communicatively associated with the node factory and configured to evaluate the node factory's representation of the XML data stream and determine whether it conforms to a known schema.

In making out this rejection of this claim, the Office simply argues that this claim is the system for carrying out the methods of claims 14-17 and rejects this claim under the same rationale as was used to reject claims 14-17. Applicant respectfully submits that whether or not the system recited in this claim can be used to carry out the method of claims 14-17 is irrelevant with respect to the Office's duty to examine this claim and specifically apply the references to each and every element appearing in the claim. Furthermore, for argument's sake, even if the method of claims 14-17 were old (which it is not), a parsing system which implements the method of claims 14-17 would be patentable if the system itself is novel and nonobvious.

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In view of the above discussion, Applicant respectfully traverses this rejection. Furthermore, Applicant is at a loss as to how to respond to this claim rejection to the Office's satisfaction. In Applicant's response to the prior Office Action (dated April 9, 2003), Applicant pointed out (on page 20, lines 18-25) that the Office failed to examine this claim. In addition, (on page 21, lines 1-5) Applicant stated that it had reviewed the references cited by the Office and argued that the claimed subject matter is neither disclosed nor suggested by those references. Applicant maintains its arguments. In addition, according to MPEP 707.07(f):

> In order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner must provide clear explanations of all actions taken by the examiner during prosecution of the application. .

> Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.

Applicant respectfully points out that the Office, in drafting the current Office Action, simply copied the rejection from the previous Office Action without taking note of the Applicant's argument and without answering the substance of it. Applicant is trying its best to further prosecution of this application but cannot provide any more specific arguments than what it has already given unless the Office can point out which portion of which reference it believes discloses or suggests each element of the claimed parsing system. Applicant respectfully requests that the Office either withdraw the rejection of this claim or specifically point out the portions of any reference(s) which the Office believes may anticipate or render obvious the subject matter of this claim.

Claims 25-29 depend either directly or indirectly from claim 24 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 24, are neither disclosed nor suggested by the references of record either singly or in combination with one another. In addition, as these claims are allowable, Dridi is not seen to add anything of significance to the rejection of claim 28.

Claims 30-33

Claim 30 recites an Extensible Markup Language (XML) parsing system.

The recited system comprises [emphasis added]:

- a collection of schema modules, each of which being configured to evaluate a different schema that is associated with an XML data stream; and
- a plurality of states associated with each schema module, individual states of a schema module defining a schema requirement relating to a particular element that is evaluated by that schema module.

In making out this rejection of this claim, the Office simply argues that claim is the system for carrying out the methods of claims 1 and 2 and is rejected under the same rationale as was used to reject claims 1 and 2. Applicant respectfully submits that whether or not the system recited in this claim can be used to carry out the method of claims 1 and 2 is irrelevant with respect to the Office's duty to examine this claim and specifically apply the references to each and every element appearing in the claim. Furthermore, for argument's sake, even if the method of claims 1 and 2 is old (which it is not), a parsing system which implements the method of claims 1 and 2 is patentable if the system itself is novel and nonobvious.

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In view of the above discussion, Applicant traverses this rejection. Applicant is at a loss as to how to respond to this claim rejection to the Office's satisfaction. Adding to Applicant's confusion is the fact that the Office has deemed claims 3 and 4 allowable where claims 3 and 4 contain similar features (i.e., schema modules and associated states). In Applicant's response to the prior Office Action (dated April 9, 2003), Applicant pointed out (on page 21, lines 21-25) that the Office failed to examine this claim. In addition, (on page 22, lines 1-5) Applicant stated that it had reviewed the references cited by the Office and argued that the claimed subject matter is neither disclosed nor suggested by those references. Applicant maintains its arguments. According to MPEP 707.07(f):

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In order to provide a complete application file history and to enhance the clarity of the prosecution history record, an examiner must provide clear explanations of all actions taken by the examiner during prosecution of the application.

Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it.

Applicant respectfully points out that the Office, in drafting the current Office Action, simply copied the rejection from the previous Office Action without taking note of the Applicant's argument and without answering the substance of it. Applicant is trying its best to further prosecution of this application but cannot provide any more specific arguments than what it has already given unless the Office can point out which portion of which reference it believes discloses or suggests each element of the claimed parsing system. Applicant respectfully requests that the Office either withdraw the rejection of this claim or specifically point out the portions of any reference(s) which the Office believes may anticipate or render obvious the subject matter of this claim.

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Claims 31-33 depend either directly or indirectly from claim 30 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 30, are neither disclosed nor suggested by the references of record either singly or in combination with one another. 'In addition, as these claims are allowable, Dridi is not seen to add anything of significance to the rejection of claims 32 and 33.

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New Claims

Claim 34 recites a method of parsing an Extensible Markup Language (XML) data stream comprising [emphasis added]:

- defining a plurality of states, individual states being associated with individual elements of an XML data stream;
- associating one or more rules with each state;
- receiving an XML data stream;
- evaluating the XML data stream against one or more of the rules for individual elements contained in the XML data stream; and
- disregarding associated portions of the XML data stream if any of the rules that are associated with those portions are violated, the disregarded portions of the XML data stream representing at least one error in the XML data stream.

None of the references of record disclose or suggest the features of this claim. Accordingly, this claim is allowable.

Claims 35-39 depend either directly or indirectly from claim 34 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 34, are neither disclosed nor suggested by the references of record either singly or in combination with one another.

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24 25 Claim 40 is simply former dependent claim 3 rewritten in independent form, including the limitations of the claim from which it formerly depended (claim 1). The Office stated on page 10, paragraph 8, of the Office Action that claim 3 would be allowable if rewritten in independent form. This claim remains in condition for allowance.

Claims 41-50 depend either directly or indirectly from claim 40 and are allowable as depending from an allowable base claim.

Claim 51 is simply former dependent claim 4 rewritten in independent form, including the limitations of the claim from which it formerly depended (claim 1). The Office stated on page 10, paragraph 8, of the Office Action that claim 4 would be allowable if rewritten in independent form. This claim remains in condition for allowance.

Claims 52-60 depend either directly or indirectly from claim 51 and are allowable as depending from an allowable base claim.

Conclusion

All of the claims are in condition for allowance. Accordingly, Applicant requests that a Notice of Allowability be issued forthwith. If the Office's next anticipated action is to be anything other than issuance of a Notice of Allowability, Applicant requests that the undersigned be contacted for the purpose of scheduling an interview.

Respectfully submitted,

Dated: 3/10/04

Lance R. Sadler

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